FUDGE LAB

( OPTIONAL ASSIGNMENT )

The following is a take home lab activity. You are required to do one of the 3 options.

Bring a sample of your product for a quality control check by Wednesday May 30th. This

activity is worth a 50 point summative grade. This sheet must be signed by your parent with their comments as to how the product turned out to verify you completed the task.

Purpose: To make a great tasting saturated solution that uses boiling point elevation to

react.

Procedure: Have your parent supervise and sign below.

Here is an example recipe you may use.

Ingredients: 3 cups sugar, ¾ cup margarine, 2/3 cup evaporated milk, 12 oz chocolate

chips (semi-sweet or your choice of flavors…stick to chocolate of some type), 7 oz jar

marshmallow crème, 1 tsp. vanilla, 1 cup nuts (optional)

1. Combine sugar, margarine and milk in 3 qt saucepan; bring to a full rolling boil,

stirring constantly. Continue boiling for 5 minutes, stirring constantly, over medium heat. (This step is to boil off the water, which will increase the boiling point, since the molality of the solution will increase when the water is boiled away.) Stirring vigorously also breaks up any crystals that form. The smaller the crystals the better the product willbe. Grainy fudge is bad!

2. Remove from heat. Stir in chocolate chips until melted.

3. Add remaining ingredients; beat until well blended. Pour into a greased or foil lined13x9 pan. Cool at room temp. Fudge can be stored in the refrigerator for severalweeks.

4. Clean lab (kitchen) so it’s spotless.

5. Remember to get full credit: you need to bring this sheet back with a parent signature and small sample of the product for quality control check.

6. Good luck and happy chemistry.

Questions:

1. When the solution is cooled, what type of solution is it?
2. Name the three types of solutions and give the definition of each.

Parent Verification: My child, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, completed this

take home lab on \_\_\_\_\_\_\_\_\_\_(date). I supervised his/her work and verify that they

followed safety rules, left the lab(kitchen) clean and neat, and completed the activity

without assistance. Please add a few words about how the product turned out.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

parent/guardian